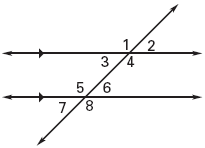
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_\_\_

HW16: Parallel Lines Cut by a Transversal Pt. I

**Geometry  
Due: Thursday, September 29th**

**Failure to show all work and write in complete sentences will result in LaSalle!**

State the whether the angles are congruent or supplementary. 

1. ∠1 and ∠5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. ∠5 and ∠8 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. ∠4 and ∠5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. ∠2 and ∠7 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. ∠3 and ∠5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. ∠6 and ∠8 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| 7. Find m∠1 and m∠2. | 8. Find x and y. | 9. Find m∠1 and m∠2. |
| 10. What is the value of x?   * 1. 40   2. 50   3. 60   4. 70 | 11. Find the value of x and y. | 12. Find the value of x and y. |

7. Let *A* = (0*,* 0), *B* = (6*,* 2), *C* = (*−*5*,* 2), *D* = (7*,* 6). Draw lines *AB* and *CD*.

a) Verify that they are parallel… (YOU MUST CALCULATE THAT THEY ARE SOMEHOW PARALLEL!)

b) Draw a transversal with a slope of *−*1 and any y-intercept.

c) Label the angles and state whether the relationship is congruent or supplementary.

